

12

EUROPEAN PATENT APPLICATION

21 Application number: **87307416.5**

51 Int. Cl.4: **H 01 R 23/70**
H 01 R 13/26

22 Date of filing: **21.08.87**

30 Priority: **15.09.86 US 907699**

43 Date of publication of application:
23.03.88 Bulletin 88/12

84 Designated Contracting States:
DE FR GB IT NL SE

88 Date of deferred publication of search report:
07.09.88 Bulletin 88/36

71 Applicant: **MOLEX INCORPORATED**
2222 Wellington Court
Lisle Illinois 60532 (US)

72 Inventor: **Silbernagel, Raymond Anthony**
1320 Jane Avenue
Naperville Illinois 60540 (US)

Funck, Gordon William
1137 N. Brainard Street
Naperville Illinois 60540 (US)

74 Representative: **Slight, Geoffrey Charles et al**
Graham Watt & Co. Riverhead
Sevenoaks Kent TN13 2BN (GB)

54 **Modular electrical connector.**

57 A low profile connector in the form of a right angle phone jack (10) for use with printed circuit boards is disclosed. The jack includes a dielectric housing member (16) having a modular plug receiving socket (18) formed therein, a forward mating end (20) and a rearward end. The socket (18) is defined by a plug-receiving opening (22) formed in the forward mating end with a lower latch receiving region (24) and extends rearwardly to meet a back surface provided in the housing member (16). The housing member (16) is mounted with its forward mating end (20) disposed beyond an edge (26) of the printed circuit board (12). The forward mating end (20) of the housing member (16) is offset downwardly so that the lower latch receiving region (24) of the plug receiving opening (22) is below the upper surface (28) of the circuit board (12). In addition, the housing member (16) co-operates with the printed circuit board surface to define the socket (18) whereby the upper surface (28) of the circuit board is the bottom surface of the socket (18). The low profile modular jack is for use with printed circuit boards arranged in modern closely-spaced mother-daughter arrangements.

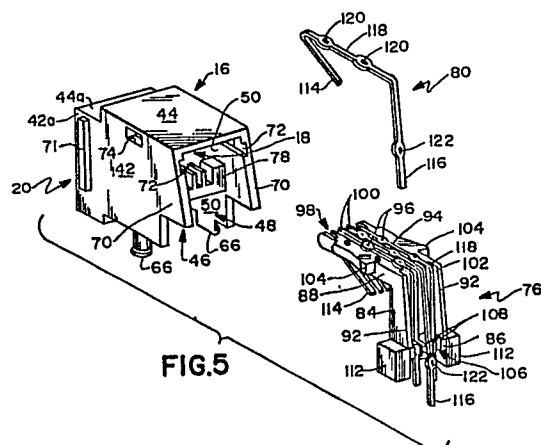


FIG. 5



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 87 30 7416

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
|--|---|--|---|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int. Cl.4) |
| Y | EP-A-0 009 867 (AMP) * Page 3, line 12 - page 5, line 1; figures 36-44 * --- | 1-6 | H 01 R 23/70 H 01 R 13/26 |
| Y,D | US-A-4 497 526 (AMP) * Column 1, line 46 - column 2, line 33; figures 3,4 * --- | 1-6 | |
| A,P D | US-A-4 618 207 (MOLEX) * Column 2, lines 22-53; figures 1-9 * --- | 1-7 | |
| A,P D | US-A-4 647 136 (MITSUMI-CINCH) * Column 1, lines 44-67; figures 6,15 * ----- | 1-7 | |
| | | | TECHNICAL FIELDS SEARCHED (Int. Cl.4) |
| | | | H 01 R 23/00 H 01 R 13/00 |
| The present search report has been drawn up for all claims | | | |
| Place of search THE HAGUE | | Date of completion of the search 14-06-1988 | Examiner CRIQUI J.J. |
| CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document | | | |